

# Notice of Allowability

Application No.

10/647,062

Examiner

LUU MATTHEW

Applicant(s)

ZHONG ET AL.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed August 17, 2006.
2. ☒ The allowed claim(s) is/are 1-2, 4-8 and 31-32; which are renumbered to claims 1-9.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawing submitted on August 17, 2006 (Figure 22) has been approved by the examiner.

### ***Examiner's Amendment***

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

-Cancel claims 9-30.

This application is in condition for allowance except for the presence of claims 9-30 directed to invention(s)/species non-elected without traverse. Accordingly, claims 9-30 have been cancelled.

### ***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

-The closest prior art, Tu (US 2004/0204821) discloses (Fig. 6) a diagram showing an area which is divided into small cells each being designated by a cell ID for searching specified points of interest (POIs), wherein shaded cells include the specified POIs. Tu further discloses (Fig. 12) an array of cells and a current user position in a process of reducing the number of cells to be retrieved for sorting and displaying the POI information.

However, Tu fails to teach the claimed limitation of

"identifying from among a staff of drivers a most frequent driver for each of the plurality of unassigned cells based upon a grid segment visiting frequency calculated for said each of said plurality of unassigned cells and each of said drivers during a reference period,

wherein said grid segment visiting frequency represents a comparison between a number of stops in said cell by said driver during said reference period and a total number of stops by said driver during said reference period;

establishing a minimum grid segment visiting frequency limit; and

classifying each of said unassigned cells as a core cell and assigning each said core cell to said identified most frequent driver, if said grid segment visiting frequency calculated for said cell and said most frequent driver is greater than said minimum grid segment visiting frequency limit."

-Smith et al (6,184,823) disclose (Fig. 8) a grid (217) overlays the geographic region (112) represented by the map (110). The grid (217) divides the geographic

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region (112) into a plurality of rectangular areas (219). The grid lines of the grid (217) represent the boundaries of rectangular areas (219). These rectangular areas (219) may be all the same size or may have different sizes depending upon the procedure used for parcelization.

-Indseth et al (US 2002/0046073) disclose (fig. 14) a method for calculation optimum routing solution for a particular industry such as a package pickup from a major transportation company (Sections 6 and 7).

-Jones (US 2003/0233190) discloses (Fig. 1) a high level schematic diagram of an advance notification system applied to a delivery truck system. Jones further discloses (Fig. 37) an on-screen display for adjusting a predefined area for activation of an impending arrival message. This illustration is for setting a grid perimeter around a stop.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUU MATTHEW whose telephone number is (571) 272-7663. The examiner can normally be reached on Flexible Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JACK KEITH can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M. Luu



**MATTHEW LUU  
PRIMARY EXAMINER**